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			EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04 January 2006</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-61</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-61</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January

4, 2006 has been entered.

Response to Amendment

2.   The amendments to the claims have been entered.   Claims 1, 16, 19, 32, 51,

and 52 are currently amended and new claims 56-61 have been added.

Response to Arguments

3.   Applicant's arguments with respect to claims 17, 18, 51, and 52 have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4.   The amendment to claim 16 overcomes the rejection under 35 U.S.C. 112 made

in the previous Office Action. The rejection of claim 16 under 35 U.S.C. 112 is

withdrawn.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-4, 6-15, 17-22, 24-35, 37-46, and 49-61 are rejected under 35 U.S.C.

103(a) as being unpatentable over Bejar et al., in view of Walker et al. (U.S. Patent

5,862,223).

In regard to claims 1, 19, and 32, Bejar et al. disclose a method, storage

medium, and apparatus comprising a storage medium for a computer system to user

human assistance in performing tasks, the method comprising:

automatically and under control of a first computer system (Fig. 1, 10, column 4,

lines 50-53), causing a task (assessment) to be performed by,

identifying a first and second subtask of the task (the task of evaluating scores

awarded by human evaluators to constructed responses is broken into subtasks by

assigning each constructed response to a category, each category representing a

subtask to be completed, Fig. 11A, step 303, column 17, lines 63-67);

identifying one or more required capabilities of a human for performance of the

first subtask (each category is an area of expertise to which the human evaluator is

assigned, step 305, column 17, line 67 to column 18, line 2 and column 8, lines 7-10

and lines 15-24);

dispatching the first subtask to a remote second computer system of a first

human for performance by said first human, the first human identified as being one or

more humans who have the capabilities that satisfy the required capabilities of the first

subtask (step 311, the constructed responses to be evaluated are transmitted to the

human evaluators at assessment stations, column 18, lines 14-19 and column 5, lines

24-32);

receiving a first result from said first human via the second computer system, the

first result generated by performance of said subtask by said first human (Fig. 11B, step

315, the constructed responses are scored by the human evaluator and the scores are

transmitted back from the assessment stations, column 18, lines 30-32); and

generating a result for said task based at least in part on said first result (step

321, the scores awarded by the human evaluator are analyzed, column 18, lines 47-51).

Bejar et al. do not disclose the dispatching step includes providing an indication

to the first human of a first level of compensation associated with the performance of the

first subtask, or providing payment to the first human for the performance of the first

subtask, the provided payment being based on the first compensation level.

Walker et al. disclose a method and apparatus for providing compensation for

humans completing subtasks (the grading of tests according to the human's

qualifications, column 29, lines 15-27). To provide the compensation, the following

steps are performed:

dispatching a subtask to a first human, the dispatching including providing an

indication to the first human of a first level of compensation associated with the

performance of the first subtask (a grading request is sent to the qualified graders, column 30, lines 6-8; a request includes a price that will be paid to the grader upon completion of the grading, column 21, lines 12-26); and

providing the payment to the first human for performance of the first subtask, the provided payment being based on the first compensation level (after completing grading, the agreed upon payment is provided to the graders, column 30, lines 35-37 and column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Bejar et al. to indicate to a first human a level of compensation for completing a subtask, then subsequently provide the first human payment corresponding with the compensation upon completion of the subtask, in order to provide a universally applicable payment protocol for the experts providing advice that allows an expert to maximize their earning potential, as taught by Walker et al. (column 9, lines 19-27).

In regard to claims 2, 20, and 33, Bejar et al. disclose the identifying by the first computer system of the first and second subtasks of the task includes decomposing the task into at least the first and second subtasks (the task of evaluating a plurality of constructed responses is broken down by assigning the constructed responses to categories, column 17, lines 52-67).

In regard to claims 3, 21, and 34, Bejar et al. disclose the method further comprises the first computer system dispatching said second subtask to a third computer system of a second human for performance by the second human (step 307, a second human evaluator is assigned to at least one of the same categories as the first human evaluator, column 18, lines 2-5), and the first computer system receiving a second result from the second human via the third computer system for the second subtask (at step 315 when scores from all the evaluators are transmitted, column 18, lines 30-32 and lines 35-37); and

the first computer system further bases its generation of the result for said task on said second result (scores of all the evaluators are analyzed, column 18, lines 47-51).

In regard to claims 4, 22, and 35, Bejar et al. disclose said task further comprising a third subtask, and the method further comprises the first computer system receiving and performing said third subtask producing a third result; and

the first computer system further bases its generation of the result for said task on said third result (Fig. 2B, step 107, a subtask of the overall task of evaluating scores awarded by human evaluators to constructed responses includes a subtask of determining the correct application to launch for the evaluator, column 7, lines 18-25, this subtask is necessary to launch the correct application for the human evaluator, thus the generation of the result for the overall task is 'based on' this result, column 8, lines 51-57).

In regard to claims 6, 24, and 37, Bejar et al. discloses said first human is one of college educated, at most high school educated, at most elementary school educated, and not formally educated (every human is *one of* these education levels; that is, these four education levels represent every level of education a human could possibly have, therefore, any human will be *one of* college educated, at most high school educated, at most elementary school educated, and not formally educated).

In regard to claims 7, 25, and 38, Bejar et al. discloses said subtask is one of text, speech, sound, and images related operations (the constructed responses evaluated by the human evaluators comprise text documents, audio responses, and drawings, column 9, lines 41-50 and column 11, lines 3-5).

In regard to claims 8, 26, and 39, Bejar et al. discloses the result is one of text, numbers, tuples, and sound (column 11, lines 5-7).

In regard to claims 9, 27, and 40, Bejar et al. discloses said task is one of text classification, image comparison, image processing, speech comparison, speech recognition, conversion of speech into text, and comparison of music samples (the human evaluator classifies the constructed responses by assigned each constructed response a score, column 18, lines 23-57).

In regard to claims 10, 28, and 41, Bejar et al. discloses said task is associated with multiple attributes related to performance of said task, the attributes including an accuracy attribute, a security attribute, a timeout attribute, a maximum time spent attribute, a maximum cost per task attribute, and a maximum total cost attribute, and wherein the identifying of the one or more humans, the dispatching of the first subtask, and the generating of the result for said task are performed in a manner to reflect the multiple associated attributes (column 10, lines 3-10 and column 13, lines 22-36).

In regard to claim 11 Bejar et al. discloses said task is associated with one or more attributes, and said attribute includes an accuracy attribute (column 13, lines 31-36).

In regard to claims 12, 29, and 42, Bejar et al. discloses dispatching said first subtask to N-1 additional humans to perform said subtask and said accuracy comprises a selection of one of majority governs, and at least N2 agreed answers, wherein N2 and N1 are integers, with N2 greater than N1 (column 15, lines 24-28 and column 16, lines 31-37).

In regard to claims 13 and 43, Bejar et al. disclose tracking the accuracy of additional humans (the accuracy of all evaluators is tracked, column 13, lines 31-36).

In regard to claims 14 and 44, Bejar et al. disclose said generation of the result

further takes into consideration the accuracy of the additional humans (column 19, lines

23-26).

In regard to claims 15, 30, and 45, Bejar et al. discloses said task is associated

with one or more attributes including a security attribute, and said security attribute

comprises a selection of one of a strict security level, a lax security level, and no

security level (constructed responses are executed in write protected mode or view only

mode, column 9, lines 31-41).

In regard to claim 16, Bejar et al. disclose said task is associated with one or

more attributes that include a "maximum time" attribute specifying a maximum amount

of time to be spent by an assigned human to perform said first subtask (elapsed time to

award a score, column 10, lines 3-7).

In regard to claims 17 and 18, Bejar et al. do not disclose said task is associated

with one or more attributes, and said attributes include a maximum cost per task

attribute or a maximum total task cost attribute.

Walker et al. disclose associating a task with one or more attributes, wherein the

attributes include a maximum cost per task attribute (see column 11, lines 40-44, an

example of criteria provided with a cost per task attribute, i.e. $50 for each solution of at

least 10 words, and a maximum total task cost attribute, i.e. $500 for the complete

solution).

It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Bejar et al. to include a maximum cost per task attribute or a

maximum total task cost attribute, so that an expert's bid for completing a task (see

column 29, line 64 to column 30, line 8) would not exceed the end user's maximums.

In regard to claim 31, Bejar et al. disclose said task is associated with one or

more attributes, wherein the attributes include a maximum time to be spent on a task

(elapsed time to award a score, column 10, lines 3-7).

Bejar et al. do not disclose said attributes include a maximum cost per task

attribute or a maximum total task cost attribute.

Walker et al. disclose associating a task with one or more attributes, wherein the

attributes include a maximum cost per task attribute (see column 11, lines 40-44, an

example of criteria provided with a cost per task attribute, i.e. $50 for each solution of at

least 10 words, and a maximum total task cost attribute, i.e. $500 for the complete

solution).

It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Bejar et al. to include a maximum cost per task attribute or a

maximum total task cost attribute, so that an expert's bid for completing a task (see

column 29, line 64 to column 30, line 8) would not exceed the end user's maximums.

In regard to claim 46, Bejar et al. disclose the first computer system is a task server system that is part of a distributed hybrid computer/human computation arrangement, and wherein the first human is one of numerous human remote from the task seer system who each use distinct client computing devices to act as nodes of the distributed hybrid computer/human computation system (Fig. 1, column 5, lines 24-32).

In regard to claim 49, Bejar et al. disclose the dispatching by the first computer system of the first subtask to the remote second computer system is performed using a defined application programming interface ("API") (see appendix A).

In regard to claim 50, Bejar et al. disclose the dispatching by the first computer system of the first subtask to the remote second computer system is performed by programmatically sending one or more messages from the first computer system to the remote computer system (column 5, lines 28-32).

In regard to claim 51, Bejar et al. do not disclose providing an indication to the first human of the payment to be provided for performance of the first subtask if the human chooses to perform the subtask.

Walker et al. disclose providing an indication to the first human of the payment to be provided for performance of the first subtask if the human chooses to perform the subtask (a grading request is sent to the qualified graders, column 30, lines 6-8; a

request includes a price that will be paid to the grader upon completion of the grading, column 21, lines 12-26).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Bejar et al. to indicate to a first human a payment for completing a subtask if the human chooses to perform the subtask, in order to provide a universally applicable payment protocol for the experts providing advice that allows an expert to maximize their earning potential, as taught by Walker et al. (column 9, lines 19-27).

In regard to claim 52, Bejar et al. do not disclose the providing of the payment to the first human is performed in response to the receiving from the first human of the first result from the performance of the first subtask.

Walker et al. disclose providing of the payment to the first human is performed in response to the receiving from the first human of the first result from the performance of the first subtask (after completing grading, the agreed upon payment is provided to the graders, column 30, lines 35-37 and column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Bejar et al. to indicate to a first human a level of compensation for completing a subtask, then subsequently provide the first human payment corresponding with the compensation upon completion of the subtask, in order to provide a universally applicable payment protocol for the experts providing advice that allows an expert to maximize their earning potential, as taught by Walker et al. (column 9, lines 19-27).

In regard to claim 53, Bejar et al. disclose the required capabilities of the human

for performance of the first subtask include an ability to speak a specified language

(English, column 8, lines 26-29).

In regard to claim 54, Bejar et al. disclose the required capabilities of the human

for performance of the first subtask include an ability to hear (constructed response may

be audio, column 11, lines 3-5).

In regard to claim 55, Bejar et al. disclose the required capabilities of the human

for performance of the first subtask include a specified degree of historical accuracy by

the human when performing subtasks (column 13, lines 31-36).

In regard to claim 56, Bejar et al. do not disclose the payment provided to the first

human is further based on part on the quality of the performed subtask.

Walker et al. disclose payment is further based on quality of the performed

subtask (column 39, lines 11-15).

It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Bejar et al. to base payment to the first human based in part on the

quality of the performed task, in order to ensure the quality of work provided by the first

human.

In regard to claim 57, Bejar et al. do not disclose the payment provided to the first human is based in part on cumulative contributions of the first human.

Walker et al. disclose payment is based on cumulative contributions of the first human (the number of questions graded, column 29, line 59 to column 30, line 8 and column 11, lines 40-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Bejar et al. to provide payment based on cumulative contributions of the first human, so that the human would be compensated for each subtask performed.

In regard to claim 58, Bejar et al. do not disclose the payment provided to the first human is based on a prior agreement with the first human.

Walker et al. disclose payment provided to the first human is based on a prior agreement with the first human (the expert accepting a subtask is an agreement that the price offered is sufficient, column 21, lines 12-29).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Bejar et al. to provide payment based on a prior agreement so the human performing the subtask would be able to decide whether the offered payment was sufficient for performing the subtask.

In regard to claim 59 Bejar et al. do not disclose the first compensation level is a first monetary amount and wherein an amount of the payment provided to the first human for the performance of the subtask is the first monetary amount.

Walker et al. disclose the first compensation level is a first monetary amount (the price, column 21, lines 12-26) and wherein an amount of the payment provided to the first human for the performance of the subtask is the first monetary amount (the expert is paid the price after completing the subtask, column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Bejar et al. to provide a monetary amount as the first compensation level and to provide that monetary amount to the first human after performance of the subtask, so the human performing the subtask would be able to decide whether the offered payment was sufficient for performing the subtask, and the correct payment would be provided to the first human.

In regard to claim 60, Bejar et al. disclose second subtasks, but do not disclose the second subtask has a distinct second monetary amount of compensation and providing payment of the secondary amount of compensation.

Walker et al. disclose the second subtask has a distinct second monetary amount of compensation associated with the performance of the second subtask (the price of a subtask is based on the qualifications of the expert, column 21, lines 14-18; as established above in regard to claim 1, each category is an area of expertise to which the human evaluator is assigned, and each category represents a subtask to be completed; since each subtask is associated with a different category, which would require different expert qualifications, and the price is based on those qualifications, the price of a second category subtask would be distinct from the first category subtask),

and wherein the method further comprises providing payment of the second monetary

amount of compensation to a second human for performance of the second subtask

(each expert is paid the price after completing the subtask, column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Bejar et al. to associate the second subtask with a distinct

secondary monetary amount of compensation and to provide that monetary amount to a

second human, so that the second human would be paid an appropriate amount

according to their area of expertise.

In regard to claim 61, Bejar et al. do not disclose providing the associated

compensation to the first human for the performance of the first subtask based in part

on the receiving of the first result.

Walker et al. disclose the first human is provided the associated compensation

after the subtask is received (the expert transmits their answer before receiving

payment, column 21, lines 38-52).

It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Bejar et al. to provide the compensation based on the receiving of

the result, so that the first human was not paid before any actual services were

rendered.

7.   Claims 5, 23, and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over

Bejar et al., in view of Walker et al., and further in view of Burstein et al. (U.S. Patent

6,181,909).

Bejar et al. and Walker et al. do not disclose the first computer system

additionally performs said second subtask (evaluates a constructed response) and the

first computer system further bases its generation of the result for said task on said

second result.

Burstein et al. disclose a method and system for performing a subtask (scoring

an essay) to produce a result (essay score, column 3, lines 45-51).

It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Bejar et al. and Walker et al. to perform said second subtask

(scoring of one of the categories of constructed responses) at the first computer using

the method of automatic essay scoring disclosed by Burstein et al., in order to provide a

standard score by which the human evaluators could be assessed.

8.   Claims 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Bejar et al., in view of Walker et al., and further in view of Christensen et al. (U.S.

Patent 5,881,230).

In regard to claim 47, Bejar et al. discloses that the services of the task server

system and the coordinating server (i.e. coordinating the performance of the first

subtask by identifying the first human as having capabilities that satisfy the identified

required capabilities and sending to the second computer system of the first human an

indication of the first subtask to be performed) are performed on the same physical

server (Fig. 1, assessment system 10, column 17, lines 63-67; column 17, line 67 to

column 18, line 2; column 8, lines 7-10 and lines 15-24; column 18, lines 14-19; and

column 5, lines 24-32).

Bejar et al. and Walker et al. do not disclose that the coordination services are

performed on a distinct coordination server remote from the task server system, wherein

the task server system sends information indicating the first subtask and required

capabilities to the remote coordination server.

Christensen et al. disclose a method for implementing application objects on

remote computers as needs dictate so that a given logical model can be implemented

independently of the underlying physical model (column 13, line 62 to column 14, line

27).

It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Bejar et al. and Walker et al. so the services of the task server and

the services of the coordinating server were implemented on separate physical servers

with the appropriate information sent between two, so that the physical performance

and administration needs of the system could be addressed without giving up the logical

model, as taught by Christensen et al. (column 13, lines 62-67).

In regard to claim 48, Bejar et al. disclose the coordinating services identify a first

and second subtask of the task (column 17, lines 63-67), wherein the coordinating

services causes the result to be generated for the task based at least in part on the first

result (column 18, lines 30-32), wherein the human is one of numerous humans who each use distinct client devices to act as nodes available to the coordinating server computing system (column 5, lines 24-28).

Bejar et al. and Walker et al. do not disclose that the coordination services are performed on a distinct coordination server remote from the task server system, wherein the task server system sends information indicating the first subtask and required capabilities to the remote coordination server.

Christensen et al. disclose a method for implementing application objects on remote computers as needs dictate so that a given logical model can be implemented independently of the underlying physical model (column 13, line 62 to column 14, line 27).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Bejar et al. and Walker et al. so the services of the task server and the services of the coordinating server were implemented on separate physical servers with the appropriate information sent between two, so that the physical performance and administration needs of the system could be addressed without giving up the logical model, as taught by Christensen et al. (column 13, lines 62-67).

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Albertalli whose telephone number is (571) 272-

7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every

second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

BLA 2/23/06

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